**Twenty-first Meeting of the CAR/SAM Regional Planning and Implementation Group
(GREPECAS/21)**
Santo Domingo, Dominican Republic, 15 to 17 November 2023

Agenda Item 3:　　　**Global and Regional Developments**
　　　　　　　　　3.3　　CAR/SAM Air Navigation Services (ANS) Implementation Level

DIGITAL DATA SETS (DDS) IMPLEMENTATION ACTIVITIES

(Presented by the Secretariat)

EXECUTIVE SUMMARY
This working paper urges the most advanced States in the implementation of Digital Data Sets (DDS) to share their good practices in the planning and publication process of their DDS through the preparation and execution of a CAR/SAM Workshop for the implementation of DDS.

Action:	Suggested actions are presented in Section 4.
Strategic Objectives:	• Safety • Air Navigation Capacity and Efficiency
References:	• Annex 15 – Aeronautical Information Services • Doc. 10066 – PANS-AIM • Meeting of GREPECAS/19 and GREPECAS/20 • SAM/AIM/16 meeting • NACC WG/AIM TF 06 Meeting • Document 8126 – AIS Manual

1.　　　Introduction

1.1　　　　ICAO Annex 15, Chapter 5, indicates that digital data will be provided in the form of data sets, with the purpose of ensuring that both aeronautical information and aeronautical data necessary for the safety, regularity, economy, and efficiency of the global Air Traffic Management (ATM) system in an environmentally sustainable manner.

1.2　　　　The role and importance of aeronautical data and aeronautical information are established with the implementation of area navigation (RNAV), performance-based navigation (PBN), computerized on-board navigation systems, communication-based on performance-based communications (PBC) and performance-based surveillance (PBS) (Doc 9869, Performance-Based Communications and Surveillance Manual - PBCS), data link systems and satellite voice communications (SATVOICE - Doc 10038 - Satellite Voice Guidance Material).

1.3   In any case, if the aeronautical information or data is altered, erroneous, late, or non-existent, the operational safety of air navigation may be affected.

1.4   Doc. 10066 – PANS-AIM, in Chapter 5, 5.3 indicates the general guidelines related to the provision of Digital Data Sets.

1.5   At the Nineteenth GREPECAS Meeting, the Secretariat issued Conclusion 19/3 **"Implementation of the Digital Data Sets (DDS), the Data Catalogue, the Standard Model for Aeronautical Information Exchange and the e-AIP"**, with relation to the implementation of the DDS.

1.6   The SAM/AIM/16 meeting noted the difficulties experienced by some States when constructing their digital data sets. Likewise, during the NAM/CAR Workshop on Data Set Management and Electronic Aeronautical Charts (eCharts), in both cases, we agreed on:

- o   Promote and develop a data management mindset.
- o   AIXM-based AIM systems must be adapted for DDS (encoding guidelines - Metadata).
- o   Conventional and digital products should be provided in parallel at the beginning of the transition to the electronic and digital environment.

2.   Analysis

2.1.   Annex 15, in Chapter 5, establishes that the basic digital data sets (DDS), which must be published and managed by States are:

- a)   AIP data sets;
- b)   field data sets;
- c)   obstacle data sets;
- d)   aerodrome mapping data sets; and
- e)   instrument flight procedure data sets.

2.2   GREPECAS considered that implementation should be a priority for aeronautical information service providers, and for this purpose, it issued Conclusion 19/3, which urged that their implementation be completed by the end of 2024, with the purpose not to delay processes related to System-Wide Information Management (SWIM). The SWIM is one of the ASBU operational improvements of the GANP and appears in the CAR/SAM ANP Vol. III.

2.3   The Secretariat monitors these implementations, to detect opportunities for improvements in the process, or to direct support from States that are more advanced in the task to the States that are beginning the path towards the construction of the DDS.

2.4   The SAM/AIM/16 Meeting observed that some States, despite having "Aeronautical Information Management" software in an electronic environment, are experiencing difficulties in the process of preparing these digital data sets. its presentation and its link with the State AIP. In a similar situation, it is observed in the CAR region that the main problem is the validation of the Data from the originators, the letters of agreement with the data providers, the integration of metadata, and the management of the different formats by the providers. data to AIM.

2.5   The Meeting of the SAM/AIM/16 and the NACC/WG AIM/TF/06 invited the Secretariat to organize the holding of a Workshop in a State that has advanced the implementation of the DDS. It was considered necessary that this Workshop be complemented with technical visits to the information management units, in order to complement the information transmitted, during the Workshop, with practical sessions.

2.6   The Secretariat considers that the support of GREPECAS is necessary for this activity, understanding that the delay in the implementation of the DDS impacts all the electronic processes of the AIM and in particular the SWIM, as well as in several ANS initiatives such as ATM with the PBN, CDM, A-CDM, TBO, etc. In this regard, the following **Draft Conclusion 21/XX is proposed:**

DRAFT CONCLUSION GREPECAS/21/XX	CONDUCTING A WORKSHOP, IN A CAR OR SAM STATE THAT HAS ADVANCED IMPLEMENTATION OF DDS (DIGITAL DATA SETS) IN SUPPORT OF ITS IMPLEMENTATION	
That: That, of the States participating in the Meeting, one proposes to be a sponsor of the Workshop for the implementation of Digital Data Sets (DDS), based on the Data Catalogue and the Exchange Models of aeronautical information and data, in all their domains, to make it possible to manage information in an electronic environment no later than the first half of 2024.		**Expected impact:** ☐ Political/Global ☒ Interregional ☐ Economic ☐ Environmental ☒ Technical/Operational
Why: To comply with the requirements of Annex 15, PANS AIM and ICAO Doc 8126 and build the technological-operational base for SWIM.		
When: No later than the first half of 2024.	**Status:**	☒ Valid / ☐ Non Valid / ☐ Completed
Who: ☒ States ☐ ICAO ☐ Others:		

3.   Conclusions

3.1   The Secretariat accompanies and supports the States in the implementation of Phase 2 of the AIS to AIM Roadmap, with the purpose of specifying Aeronautical Information Management in an electronic environment and preparing the enablers, of the AIM area, for System-Wide Information Management (SWIM).

3.2   The Secretariat understands that the meeting should once again urge States to observe GREPECAS Conclusion 19/03, cited in paragraph 1.5, to accelerate the process of implementation of the DDS.

3.3   The Meeting could invite the most advanced States, in the process of implementing the DDS, to share their good practices, by delivering a Workshop with practical sessions, related to the practices they have implemented to achieve this goal. Which can be attended to through the Workshop proposed in Section 2.6.

4.   Suggested action

4.1   The Meeting is invited to:

a) note the information in this Working Paper;

b) urge the States with the greatest progress in the implementation of the DDS to organize and deliver the activity requested in Section 3.3, approving the conclusion of paragraph 2.6; and

c) consider other actions that you consider appropriate.

— END —